1. (Amended) A fuel cell power system comprising:

a plurality of fuel cells electrically coupled with plural terminals and individually configured to convert chemical energy into electricity, wherein the fuel cells are configured to be individually selectively deactivated and remaining ones of the fuel cells are configured to provide electricity to the terminals with another of the fuel cells deactivated; and

a digital control system configured to at least one of control and monitor an operation of the fuel cells.

Cancel claim 8.

19 20. (Amended) The fuel cell power system according to claim [19] 1 wherein the control system is configured to implement a shut down operation [deactivates] to deactivate one or more of the fuel cells.

20 19 21. (Amended) The fuel cell power system according to claim [19] 20 wherein the control system is configured to implement the shut down operation [deactivates] to deactivate all the fuel cells.

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32. (Amended) A fuel cell power system comprising:

a housing;

a plurality of terminals;

[at least one fuel cell] a plurality of fuel cells within the housing and electrically coupled with the terminals and configured to convert chemical energy into electricity, wherein the fuel cells are configured to be individually selectively deactivated and remaining ones of the fuel cells are configured to provide electricity to the terminals with another of the fuel cells deactivated;

a bleed valve configured to selectively purge matter from [the] at least one [fuel cell] of the fuel cells; and

a control system configured to control selective positioning of the bleed valve.

34. (Amended) The fuel cell power system according to claim 32 wherein the [at least one fuel cell comprises a plurality of] fuel cells comprise polymer electrolyte membrane fuel cells.

Cancel claims 35-36.

38. (Amended) The fuel cell power system according to claim 32 further comprising a connection arranged to provide drainage from an anode side of [the] at least one [fuel cell] of the fuel cells to the bleed valve.

36 39. (Amended) A fuel cell power system comprising:

a housing;

a plurality of terminals;

[at least one fuel cell] a plurality of fuel cells within the housing and electrically coupled with the terminals and configured to convert chemical energy into electricity, wherein the fuel cells are configured to be individually selectively deactivated and remaining ones of the fuel cells are configured to provide electricity to the terminals with another of the fuel cells deactivated;

a fan within the housing and configured to direct air to [the] at least one [fuel cell] of the fuel cells; and

a control system configured to control an operation of the fan.

38 41. (Amended) The fuel cell power system according to claim 39 36 wherein the [at least one fuel cell comprises a plurality of] fuel cells comprise polymer electrolyte membrane fuel cells.

Cancel claims 42-43.

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44. (Amended) The fuel cell power system according to claim 39 further comprising at least one sensor configured to at least one of monitor current supplied to a load coupled with the terminals and monitor voltage of [the] at least one [fuel cell] of the fuel cells, and the control system is configured to control a rate of air flow of the fan responsive to the monitoring.

45. (Amended) The fuel cell power system according to claim 39 wherein the [at least one fuel cell includes] fuel cells individually include a cathode side and the fan and the housing are configured to direct air into the cathode side of [the] at least one [fuel cell] of the fuel cells.

46. (Amended) The fuel cell power system according to claim 39 further comprising a plenum within the housing and configured to direct air from the fan to [the] at least one [fuel cell] of the fuel cells.

47. (Amended) The fuel cell power system according to claim 46 wherein the plenum is configured to direct air to [a cathode side of the at least one fuel cell] cathode sides of the fuel cells.

51. (Amended) A fuel cell power system comprising:

a housing;

a plurality of terminals;

[at least one fuel cell] a plurality of fuel cells within the housing and electrically coupled with the terminals and configured to convert chemical energy into electricity, wherein the fuel cells are configured to be individually selectively deactivated and remaining ones of the fuel cells are configured to provide electricity to the terminals with another of the fuel cells deactivated;

a control system configured to at least one of control and monitor an operation of [the] at least one [fuel cell] of the fuel cells; and

an operator interface coupled with the control system to indicate at least one operational status responsive to control from the control system.

53. (Amended) The fuel cell power system according to claim 51 wherein the [at least one fuel cell comprises a plurality of] fuel cells comprise polymer electrolyte membrane fuel cells.

Cancel claims 54-55.

59. (Amended) A fuel cell power system comprising:

a plurality of terminals;

at least one fuel cell electrically coupled with the terminals and configured to convert chemical energy into electricity;

a power supply [configured to selectively supply electricity] comprising a battery; and

a control system configured to receive electricity from the battery and to at least one of control and monitor at least one [operational condition of the power supply] operation of the at least one fuel cell.

64. (Amended) The fuel cell power system according to claim 59 wherein the [power supply supplies electricity to the control system] control circuitry is configured to monitor an electrical condition of the battery and to control charge circuitry to charge the battery responsive to the monitoring of the electrical condition of the battery.

65. (Amended) The fuel cell power system according to claim 59 wherein the [power supply includes a] battery is configured to supply electricity to the control system during a start-up operation of the fuel cell power system.

66. (Amended) The fuel cell power system according to claim [65] 59 further comprising charge circuitry configured to selectively charge the battery responsive to control from the control system.

68. (Amended) A fuel cell power system comprising:

a plurality of terminals;

[at least one fuel cell] a plurality of fuel cells electrically coupled with the terminals and configured to convert chemical energy into electricity, wherein the fuel cells are configured to be individually selectively deactivated and remaining ones of the fuel cells are configured to provide electricity to the terminals with another of the fuel cells deactivated;

a sensor configured to monitor at least one electrical condition of [the] at least one [fuel cell] of the fuel cells; and

a control system coupled with the sensor and configured to monitor the sensor.

70. (Amended) The fuel cell power system according to claim 68 wherein the [at least one fuel cell comprises a plurality of] fuel cells comprise polymer electrolyte membrane fuel cells.

Cancel claims 71-72.

74. (Amended) The fuel cell power system according to claim 68 further comprising a fan configured to direct air to [the] at least one [fuel cell] of the fuel cells and the control system is configured to control the fan responsive to the at least one electrical condition.

75. (Amended) A fuel cell power system comprising:

a plurality of terminals;

a plurality of fuel cells electrically coupled with the terminals and configured to convert chemical energy into electricity;

a main valve adapted to couple with a fuel source [and configured to selectively supply fuel to the fuel cells];

a plurality of auxiliary valves in fluid communication with the main valve and configured to selectively supply fuel to respective fuel cells; and

a control system configured to control the main valve.

79. (Amended) The fuel cell power system according to claim 75 [further comprising a plurality of auxiliary valves configured to selectively supply fuel to respective fuel cells] wherein the auxiliary valves are positioned intermediate the main valve and respective fuel cells.

88. (Amended) A fuel cell power system comprising:

a housing;

a plurality of terminals;

at least one fuel cell within the housing and electrically coupled with the terminals and configured to convert chemical energy into electricity;

[a fuel delivery system configured to supply fuel to the at least one fuel cell;]

a [fuel] hydrogen sensor positioned within the housing; and

a control system configured to monitor a detection of [fuel] hydrogen within the housing using the [fuel detection] hydrogen sensor.

93. (Amended) The fuel cell power system according to claim 88 further comprising an operator interface and the control system is configured to control the operator interface to indicate a detection of [fuel] hydrogen.

94. (Amended) The fuel cell power system according to claim 88 [wherein the fuel sensor comprises a hydrogen gas sensor] further comprising a fuel delivery system configured to supply hydrogen to the at least one fuel cell.

~~95~~. (Amended) The fuel cell power system according to claim [88] ~~94~~ wherein the at least one fuel cell comprises a plurality of fuel cells, and the fuel delivery system comprises a plurality of valves configured to supply [fuel] hydrogen to respective ones of the fuel cells.

~~96~~. (Amended) The fuel cell power system according to claim ~~95~~ wherein the control system is configured to selectively close the valves responsive to a detection of [fuel] hydrogen using the [fuel] hydrogen sensor.

~~97~~. (Amended) The fuel cell power system according to claim ~~88~~ further comprising a heater configured to selectively impart heat flux to the [fuel] hydrogen sensor.

100 110. (Amended) A fuel cell power system comprising:

a plurality of terminals;

[at least one fuel cell] a plurality of fuel cells within the housing and electrically coupled with the terminals and configured to convert chemical energy into electricity;

A19 OK [at least one switching device] a plurality of switching devices individually configured to selectively shunt [the at least one fuel cell] at least one of the fuel cells; and

a control system configured to control the [at least one switching device] switching devices.

Please cancel claim 116.

106 117. (Amended) The fuel cell power system according to claim [116] A20 100 110 wherein the control system is configured to sequentially shunt the fuel cells using the respective switching devices.

107 118. (Amended) The fuel cell power system according to claim [116] 100 110 wherein the control system is configured to shunt individual ones of the fuel cells using the respective switching devices.

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119. (Amended) The fuel cell power system according to claim [116] 118 wherein the control system is configured to shunt the individual ones of the fuel cells according to a specified order.

120. (Amended) The fuel cell power system according to claim [116] 110 further comprising a plurality of valves individually configured to selectively supply fuel to respective fuel cells, and wherein the control system is configured to control the valves.

122. (Amended) The fuel cell power system according to claim [116] 110 wherein the switching devices comprise MOSFET switching devices.

112 123. (Amended) A fuel cell power system comprising:

a housing;

a plurality of terminals;

at least one fuel cell within the housing and electrically coupled with the terminals and configured to convert chemical energy into electricity;

a switching device coupled intermediate the at least one fuel cell and one of the terminals; [and]

a control system coupled with the switching device and configured to control the switching device to selectively couple the terminal with the at least one fuel cell; and

a temperature sensor positioned within the housing, wherein the control system is configured to monitor the temperature within the housing and to couple the terminal with the at least one fuel cell using the switching device responsive to the temperature being within a predefined range.

110 129. (Amended) The fuel cell power system according to claim 123 [further comprising a temperature sensor positioned within the housing, and the control system is configured to monitor the temperature within the housing and to couple the terminal with the at least one fuel cell using the switching device responsive to the temperature being within a predefined range] wherein the terminals are adapted to be electrically coupled with a load.

130. (Amended) A method of controlling a fuel cell power system comprising:

providing a plurality of fuel cells individually configured to convert chemical energy into electricity;

electrically coupling the plurality of fuel cells;

providing a first terminal coupled with the fuel cells;

providing a second terminal coupled with the fuel cells; [and]

coupling a digital control system with the fuel cells to at least one of monitor and control an operation of the fuel cells; and

deactivating at least one of the fuel cells.

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135. (Amended) The method according to claim [134] 130 further comprising [deactivating at least one of the fuel cells] controlling the deactivating using the digital control system.

136. (Amended) The method according to claim [135] 130 wherein the deactivating comprises physically removing.

137. (Amended) The method according to claim [135] 130 wherein the deactivating comprises electrically bypassing.

138. (Amended) The method according to claim [135] ~~130~~ further comprising providing electricity to a load coupled with the terminals with the at least one fuel cell deactivated.

150. (Amended) The method according to claim ~~149~~ wherein the implementing [deactivates one or more of the fuel cells] comprises the deactivating.

151. (Amended) The method according to claim ~~149~~ wherein the implementing [deactivates all of the fuel cells] comprises deactivating all of the fuel cells.

152. (Amended) A method of controlling a fuel cell power system comprising:

providing [at least one fuel cell] a plurality of fuel cells configured to convert chemical energy into electricity;

providing a first terminal coupled with the [at least one fuel cell] fuel cells;

providing a second terminal coupled with the [at least one fuel cell] fuel cells;

supplying fuel to the [at least one fuel cell; and] fuel cells;

controlling the supplying using a control system; and

deactivating at least one of the fuel cells.

154. (Amended) The method according to claim 152 wherein the providing the [at least one fuel cell comprises providing the at least one fuel cell having a plurality of] fuel cells comprises providing polymer electrolyte membrane fuel cells.

155. (Amended) The method according to claim 152 [wherein the providing the at least one fuel cell comprises providing a plurality of fuel cells] further comprising controlling the deactivating using the control system.

156. (Amended) The method according to claim [155 further comprising deactivating at least one of the fuel cells] 152 further comprising controlling the deactivating using the control system and the controlling the supplying comprises ceasing delivery of the fuel to the at least one deactivated fuel cell.

157. (Amended) The method according to claim [156] 152 further comprising providing electricity to a load coupled with the terminals with the at least one fuel cell deactivated.

158. (Amended) The method according to claim 152 further comprising monitoring at least one electrical characteristic of the at least one deactivated fuel cell, and the [controlling] deactivating is responsive to the monitoring.

159. (Amended) A method of controlling a fuel cell power system comprising:

providing at least one fuel cell configured to convert chemical energy into electricity;

providing a first terminal coupled with the at least one fuel cell;

providing a second terminal coupled with the at least one fuel cell;

selectively [exhausting] bleeding a connection coupled with the at least one fuel cell to purge matter from the at least one fuel cell; and

controlling the [exhausting] bleeding using a control system.

165. (Amended) The method according to claim 159 wherein the selectively [exhausting] bleeding comprises periodically [exhausting] bleeding responsive to control of the control system.

166. (Amended) The method according to claim 159 wherein the [exhausting] bleeding comprises [exhausting] bleeding using a bleed valve.

167. (Amended) The method according to claim 159 wherein the [exhausting] bleeding comprises [exhausting] bleeding to purge diluents from an anode of the at least one fuel cell.

168. (Amended) A method of controlling a fuel cell power system comprising:

providing at least one fuel cell configured to convert chemical energy into electricity;

providing a first terminal coupled with the at least one fuel cell;

providing a second terminal coupled with the at least one fuel cell;

monitoring the temperature of the air;

directing air to the at least one fuel cell; and

controlling the directing using a control system.

174. (Amended) The method according to claim 168 further comprising providing electricity to a load coupled with the terminals, monitoring the providing of electricity, and the controlling is responsive to the monitoring of the providing of electricity.

175. (Amended) The method according to claim 168 further comprising monitoring at least one of voltage of the at least one fuel cell and current passing through the at least one fuel cell, and the controlling is responsive to the monitoring of at least one of voltage and current.

179. (Amended) The method according to claim 168 [further comprising monitoring the temperature of the air] wherein the controlling is responsive to the monitoring.

180. (Amended) The method according to claim [179] 168 further comprising controlling a modifying element using the control system to control the temperature of the air responsive to the monitoring.

181. (Amended) A method of controlling a fuel cell power system comprising:

providing at least one fuel cell configured to convert chemical energy into electricity;

providing a first terminal coupled with the at least one fuel cell;

providing a second terminal coupled with the at least one fuel cell;

indicating at least one operational status of the fuel cell power system using an operator interface; [and]

controlling the indicating using a control system; and

forwarding the at least one operational status to a remote device.

189. (Amended) The method according to claim 181 further comprising [forwarding the at least one operational status to a] receiving communications from the remote device.

191. (Amended) A method of controlling a fuel cell power system comprising:

providing at least one fuel cell configured to convert chemical energy into electricity;

providing a first terminal coupled with the at least one fuel cell;

providing a second terminal coupled with the at least one fuel cell;

supplying electricity to a control system using a power supply comprising a battery; and

monitoring at least one [electrical condition of the power supply] operation of the at least one fuel cell using [a] the control system.

197. (Amended) The method according to claim 191 [wherein the supplying comprises supplying electricity to the control system] further comprising monitoring an electrical condition of the battery and controlling charging of the battery responsive to the monitoring of the electrical condition of the battery.

198. (Amended) The method according to claim 191 wherein the supplying comprises supplying power using the [power supply comprising a] battery to the control system during a start-up operation of the fuel cell power system.

199. (Amended) The method according to claim [198] 191 further comprising:

charging the battery; and

controlling the charging using the control system.

200. (Amended) A method of controlling a fuel cell power system comprising:

providing at least one fuel cell configured to convert chemical energy into electricity;

providing a first terminal coupled with the at least one fuel cell;

providing a second terminal coupled with the at least one fuel cell; [and]

monitoring an electrical condition of the at least one fuel cell using a control system; and

shunting the at least one fuel cell after the monitoring.

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208. (Amended) The method according to claim 200 [further comprising shunting the at least one fuel cell after] wherein the shunting is responsive to the monitoring.

209. (Amended) A method of controlling a fuel cell power system comprising:

providing a plurality of fuel cells individually configured to convert chemical energy into electricity;

providing a first terminal coupled with the fuel cells;

providing a second terminal coupled with the fuel cells;

supplying fuel to the fuel cells, wherein the supplying comprises:

supplying using a main valve; and

supplying using a plurality of auxiliary valves in fluid communication with the main valve and respective fuel cells; and

controlling the supplying using a control system.

214. (Amended) The method according to claim 209 wherein the supplying comprises supplying using [a main valve] the auxiliary valves positioned intermediate the main valve and the respective fuel cells.

215. (Amended) The method according to claim 209 wherein the supplying comprises[:

supplying using a main valve; and

supplying using a plurality of auxiliary valves] selectively ceasing the supplying of fuel to at least one of the fuel cells using a respective one of the auxiliary valves.

216. (Amended) The method according to claim [215] 209 wherein the controlling comprises controlling the main valve and the auxiliary valves using the control system.

241. (Amended) A method of controlling a fuel cell power system comprising:

providing [at least one fuel cell] a plurality of fuel cells configured to convert chemical energy into electricity;

providing a first terminal coupled with the [at least one fuel cell] fuel cells;

providing a second terminal coupled with the [at least one fuel cell] fuel cells;

shunting the [at least one fuel cell] fuel cells according to a specified order; and

controlling the shunting using a control system.

243. (Amended) The method according to claim 241 wherein the providing the [at least one fuel cell comprises providing the fuel cell having a plurality of] fuel cells comprises providing polymer electrolyte membrane fuel cells.

Please cancel claim 245.

246. (Amended) The method according to claim [245] 241 further comprising deactivating at least one of the fuel cells.

248. (Amended) The method according to claim [245 further comprising] 241 wherein the shunting according to the specified order comprises sequentially shunting the fuel cells.

249. (Amended) The method according to claim [245 further comprising shunting individual ones of the fuel cells] 241 further comprising:

detecting a failed one of the fuel cells; and

ceasing supply of fuel to the failed fuel cell responsive to the detecting.

250. (Amended) The method according to claim [245 further comprising shunting the fuel cells according to a specified order] 249 wherein the detecting comprises monitoring an electrical characteristic of the fuel cells.

251. (Amended) The method according to claim [245] 241 further comprising:

[supplying fuel to the fuel cells] detecting the presence of fuel; and

ceasing the supplying [to shunted fuel cells] responsive to the detecting.

252. (Amended) A method of controlling a fuel cell power system comprising:

providing at least one fuel cell configured to convert chemical energy into electricity;

providing a first terminal coupled with the at least one fuel cell;

providing a second terminal coupled with the at least one fuel cell;

switching a connection immediate one of the terminals and the at least one fuel cell; [and]

controlling the switching using a control system; and

monitoring a temperature within a housing about the at least one fuel cell and wherein the controlling is responsive to the monitoring.

258. (Amended) The method according to claim 252 further comprising monitoring [a temperature within a housing about] an electrical characteristic of the at least one fuel cell and the controlling is responsive to the monitoring.

New Claims

Please add the following new claims:

263. A fuel cell power system comprising:

a plurality of fuel cells electrically coupled with plural terminals and individually configured to convert chemical energy into electricity; and

a digital control system comprising a plurality of distributed controllers configured to at least one of control and monitor an operation of the fuel cells.

264. The fuel cell power system according to claim 263 wherein the distributed controllers are configured in a master\slave relationship.

265. A fuel cell power system comprising:

a plurality of fuel cells electrically coupled with plural terminals and individually configured to convert chemical energy into electricity;

a digital control system configured to at least one of control and monitor an operation of the fuel cells; and

a plurality of valves configured to supply fuel to respective fuel cells, and the control system is configured to control the valves.

250 266. A fuel cell power system comprising:

a plurality of fuel cells electrically coupled with plural terminals and individually configured to convert chemical energy into electricity;

a digital control system configured to at least one of control and monitor an operation of the fuel cells; and

a communication port adapted to couple with a remote device, and the control system is configured to communicate with the remote device via the communication port.

251 267. A fuel cell power system comprising:

a plurality of fuel cells electrically coupled with plural terminals and individually configured to convert chemical energy into electricity;

a digital control system configured to at least one of control and monitor an operation of the fuel cells; and

a switching device intermediate one of the terminals and the fuel cells, and the control system is configured to control the switching device.

252 268. A fuel cell power system comprising:

a plurality of fuel cells electrically coupled with plural terminals and individually configured to convert chemical energy into electricity;

a digital control system configured to at least one of control and monitor an operation of the fuel cells;

a housing about the fuel cells; and

a fuel sensor configured to monitor for the presence of fuel within the housing, and the control system is coupled with the fuel sensor and configured to implement a shut down operation responsive to a detection of fuel within the housing.

253 269. A fuel cell power system comprising:

a housing;

a plurality of terminals;

at least one fuel cell within the housing and electrically coupled with the terminals and configured to convert chemical energy into electricity;

a bleed valve configured to selectively purge matter from the at least one fuel cell; and

a control system comprising a plurality of distributed controllers, wherein the control system is configured to control selective positioning of the bleed valve.

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270. A fuel cell power system comprising:

a housing;

a plurality of terminals;

at least one fuel cell within the housing and electrically coupled with the terminals and configured to convert chemical energy into electricity;

a fan within the housing and configured to direct air to the at least one fuel cell; and

a control system comprising a plurality of distributed controllers, wherein the control system is configured to control an operation of the fan.

271. A fuel cell power system comprising:

a housing;

a plurality of terminals;

at least one fuel cell within the housing and electrically coupled with the terminals and configured to convert chemical energy into electricity;

a control system comprising a plurality of distributed controllers, wherein the control system is configured to at least one of control and monitor an operation of the at least one fuel cell; and

an operator interface coupled with the control system to indicate at least one operational status of the fuel cell power system responsive to control from the control system.

272. A fuel cell power system comprising:

a plurality of terminals;

at least one fuel cell electrically coupled with the terminals and configured to convert chemical energy into electricity;

a sensor configured to monitor at least one electrical condition of the at least one fuel cell; and

a control system comprising a plurality of distributed controllers, wherein the control system is coupled with the sensor and configured to monitor the sensor.

273. A fuel cell power system comprising:

a plurality of terminals;

a plurality of fuel cells electrically coupled with the terminals and configured to convert chemical energy into electricity, wherein the fuel cells are configured to be individually selectively deactivated and remaining ones of the fuel cells are configured to provide electricity to the terminals with another of the fuel cells deactivated;

a main valve adapted to couple with a fuel source and configured to selectively supply fuel to the fuel cells; and

a control system configured to control the main valve.

258 274. A fuel cell power system comprising:

a housing;

a plurality of terminals;

at least one fuel cell within the housing and electrically coupled with the terminals and configured to convert chemical energy into electricity;

a fuel delivery system configured to supply fuel to the at least one fuel cell;

a fuel sensor positioned within the housing; and

a control system comprising a plurality of distributed controllers, wherein the control system is configured to monitor a detection of fuel within the housing using the fuel sensor.

259 275. A fuel cell power system comprising:

a housing;

a plurality of terminals;

a plurality of fuel cells within the housing and electrically coupled with the terminals and configured to convert chemical energy into electricity, wherein the fuel cells are configured to be individually selectively deactivated and remaining ones of the fuel cells are configured to provide electricity to the terminals with another of the fuel cells deactivated;

a fuel delivery system configured to supply fuel to the at least one fuel cell;

a fuel sensor positioned within the housing; and

a control system configured to monitor a detection of fuel within the housing using the fuel sensor.

276. A fuel cell power system comprising:

a housing;

a plurality of terminals;

a plurality of fuel cells within the housing and electrically coupled with the terminals and configured to convert chemical energy into electricity;

a fuel delivery system comprising a plurality of valves configured supply fuel to respective ones of the fuel cells;

a fuel sensor positioned within the housing; and

a control system configured to monitor a detection of fuel within the housing using the fuel sensor.

277. The fuel cell power system according to claim 276 wherein the control system is configured to selectively close the valves responsive to a detection of fuel using the fuel sensor.

262. 278. A fuel cell power system comprising:

a plurality of terminals;

at least one fuel cell within the housing and electrically coupled with the terminals and configured to convert chemical energy into electricity;

at least one switching device configured to selectively shunt the at least one fuel cell; and

a control system comprising a plurality of distributed controllers, wherein the control system is configured to control the at least one switching device.

263. 279. A fuel cell power system comprising:

a plurality of terminals;

a plurality of fuel cells within the housing and electrically coupled with the terminals and configured to convert chemical energy into electricity, wherein the fuel cells are configured to be individually selectively deactivated and remaining ones of the fuel cells are configured to provide electricity to the terminals with another of the fuel cells deactivated;

at least one switching device configured to selectively shunt at least one of the fuel cells; and

a control system configured to control the at least one switching device.

264 280. A fuel cell power system comprising:

a housing;

a plurality of terminals;

at least one fuel cell within the housing and electrically coupled with the terminals and configured to convert chemical energy into electricity;

a switching device coupled intermediate the at least one fuel cell and one of the terminals; and

a control system comprising a plurality of distributed controllers, wherein the control system is coupled with the switching device and configured to control the switching device to selectively couple the terminal with the at least one fuel cell.

265 281. A method of controlling a fuel cell power system comprising:

providing a plurality of fuel cells individually configured to convert chemical energy into electricity;

electrically coupling the plurality of fuel cells;

providing a first terminal coupled with the fuel cells;

providing a second terminal coupled with the fuel cells;

providing a digital control system comprising a plurality of distributed controllers; and

coupling the digital control system with the fuel cells to at least one of monitor and control an operation of the fuel cells.

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266 282. A method of controlling a fuel cell power system comprising:

providing a plurality of fuel cells individually configured to convert chemical energy into electricity;

electrically coupling the plurality of fuel cells;

providing a first terminal coupled with the fuel cells;

providing a second terminal coupled with the fuel cells;

selectively shunting at least one of the fuel cells; and

coupling a digital control system with the fuel cells to at least one of monitor and control an operation of the fuel cells.

267 283. The method according to claim 266 282 further comprising monitoring at least one electrical characteristic of the fuel cells, and wherein the shunting comprises shunting responsive to the monitoring.

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284. A method of controlling a fuel cell power system comprising:

providing a plurality of fuel cells individually configured to convert chemical energy into electricity;

electrically coupling the plurality of fuel cells;

providing a first terminal coupled with the fuel cells;

providing a second terminal coupled with the fuel cells;

coupling a digital control system with the fuel cells to at least one of monitor and control an operation of the fuel cells;

supplying fuel to the fuel cells using a plurality of auxiliary valves in fluid communication with the fuel cells; and

controlling the auxiliary valves using the control system.

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285. The method according to claim 284 further comprising:

supplying fuel to the auxiliary valves using a main valve; and

controlling the main valve using the control system.

286. A method of controlling a fuel cell power system comprising:

providing a plurality of fuel cells individually configured to convert chemical energy into electricity;

electrically coupling the plurality of fuel cells;

providing a first terminal coupled with the fuel cells;

providing a second terminal coupled with the fuel cells;

coupling a digital control system with the fuel cells to at least one of monitor and control an operation of the fuel cells;

communicating with a remote device using a communication port; and

controlling the communicating using the control system.

287. A method of controlling a fuel cell power system comprising:

providing a plurality of fuel cells individually configured to convert chemical energy into electricity;

electrically coupling the plurality of fuel cells;

providing a first terminal coupled with the fuel cells;

providing a second terminal coupled with the fuel cells;

coupling a digital control system with the fuel cells to at least one of monitor and control an operation of the fuel cells;

monitoring for the presence of fuel within a housing about the fuel cells; and

implementing a shut down operation responsive to the monitoring using the control system.

288. The method according to claim 287 wherein the implementing deactivates one or more of the fuel cells.

289. The method according to claim 287 wherein the implementing deactivates all of the fuel cells.

290. A method of controlling a fuel cell power system comprising:

providing at least one fuel cell configured to convert chemical energy into electricity;

providing a first terminal coupled with the at least one fuel cell;

providing a second terminal coupled with the at least one fuel cell;

providing a control system comprising a plurality of distributed controllers;

supplying fuel to the at least one fuel cell; and

controlling the supplying using the control system.

291. A method of controlling a fuel cell power system comprising:

providing at least one fuel cell configured to convert chemical energy into electricity;

providing a first terminal coupled with the at least one fuel cell;

providing a second terminal coupled with the at least one fuel cell;

providing a control system comprising a plurality of distributed controllers;

directing air to the at least one fuel cell; and

controlling the directing using the control system.

292. A method of controlling a fuel cell power system comprising:

providing a plurality of fuel cells configured to convert chemical energy into electricity;

providing a first terminal coupled with the fuel cells;

providing a second terminal coupled with the fuel cells;

directing air to the fuel cells;

deactivating at least one of the fuel cells; and

controlling the directing using a control system.

293. The method according to claim 292 further comprising providing electricity to a load coupled with the terminals with the at least one fuel cell deactivated.

294. A method of controlling a fuel cell power system comprising:

providing at least one fuel cell configured to convert chemical energy into electricity;

providing a first terminal coupled with the at least one fuel cell;

providing a second terminal coupled with the at least one fuel cell;

providing electricity to a load coupled with the terminals;

monitoring the providing the electricity;

directing air to the at least one fuel cell; and

controlling the directing using a control system responsive to the monitoring.

295. A method of controlling a fuel cell power system comprising:

providing at least one fuel cell configured to convert chemical energy into electricity;

providing a first terminal coupled with the at least one fuel cell;

providing a second terminal coupled with the at least one fuel cell;

providing a control system comprising a plurality of distributed controllers;

indicating at least one operational status of the fuel cell power system using an operator interface; and

controlling the indicating using the control system.

296. A method of controlling a fuel cell power system comprising:

providing a plurality of fuel cells configured to convert chemical energy into electricity;

providing a first terminal coupled with the fuel cells;

providing a second terminal coupled with the fuel cells;

deactivating at least one of the fuel cells;

indicating at least one operational status of the fuel cell power system using an operator interface; and

controlling the indicating using a control system.

297. The method according to claim 296 further comprising providing electricity to a load coupled with the terminals with the at least one fuel cell deactivated.

298. A method of controlling a fuel cell power system comprising:

providing at least one fuel cell configured to convert chemical energy into electricity;

providing a first terminal coupled with the at least one fuel cell;

providing a second terminal coupled with the at least one fuel cell;

providing a control system comprising a plurality of distributed controllers; and

monitoring an electrical condition of the at least one fuel cell using the control system.

299. A method of controlling a fuel cell power system comprising:

providing a plurality of fuel cells configured to convert chemical energy into electricity;

providing a first terminal coupled with the fuel cells;

providing a second terminal coupled with the fuel cells;

monitoring an electrical condition of at least one of the fuel cells using a control system; and

deactivating at least one of the fuel cells.

300. The method according to claim 299 further comprising providing electricity to a load coupled with the terminals with the at least one fuel cell deactivated.

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301. A method of controlling a fuel cell power system comprising:

providing a plurality of fuel cells individually configured to convert chemical energy into electricity;

providing a first terminal coupled with the fuel cells;

providing a second terminal coupled with the fuel cells;

providing a control system comprising a plurality of distributed controllers;

supplying fuel to the fuel cells; and

controlling the supplying using the control system.

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302. A method of controlling a fuel cell power system comprising:

providing a plurality of fuel cells individually configured to convert chemical energy into electricity;

providing a first terminal coupled with the fuel cells;

providing a second terminal coupled with the fuel cells;

supplying fuel to the fuel cells;

controlling the supplying using a control system; and

deactivating at least one of the fuel cells.

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303. The method according to claim 302 further comprising providing electricity to a load coupled with the terminals with the at least one fuel cell deactivated.

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304. A method of controlling a fuel cell power system comprising:

providing at least one fuel cell configured to convert chemical energy into electricity;

providing a first terminal coupled with the at least one fuel cell;

providing a second terminal coupled with the at least one fuel cell;

providing a control system comprising a plurality of distributed controllers;

shunting the at least one fuel cell; and

controlling the shunting using the control system.

305. A method of controlling a fuel cell power system comprising:

providing at least one fuel cell configured to convert chemical energy into electricity;

providing a first terminal coupled with the at least one fuel cell;

providing a second terminal coupled with the at least one fuel cell;

providing a control system comprising a plurality of distributed controllers;

switching a connection immediate one of the terminals and the at least one fuel cell; and

controlling the switching using the control system.

306. A fuel cell power system comprising:

a plurality of fuel cells electrically coupled with plural terminals and individually configured to convert chemical energy into electricity;

a digital control system configured to at least one of control and monitor an operation of the fuel cells; and

a plurality of switching devices configured to selectively shunt respective fuel cells.

307. The fuel cell power system according to claim 306 wherein the control system is configured to monitor at least one electrical characteristic of the fuel cells and to control the switching devices responsive to the monitoring.

308. A fuel cell power system comprising:

a plurality of fuel cells electrically coupled with plural terminals and individually configured to convert chemical energy into electricity;

a digital control system configured to at least one of control and monitor an operation of the fuel cells;

a housing about the fuel cells;

a temperature sensor within the housing; and

an air temperature control assembly configured to at least one of increase and decrease the temperature in the housing.

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309. The fuel cell power system according to claim 308 wherein the control system is configured to monitor temperature using the temperature sensor and to control the air temperature control assembly responsive to the monitoring to maintain the temperature within the housing within a predefined range.

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310. The fuel cell power system according to claim 308 wherein the control system is configured to monitor temperature using the temperature sensor and to control the air temperature control assembly responsive to the monitoring to maintain the temperature within the housing within a predefined range of approximately 25 °Celsius to 80 °Celsius.